Organic acids (Organix® profiles)

Optimization of the analysis to the more precise LC-MS/MS

Dear colleagues,
dear members of the medical practice team,

thanks to the introduction of new innovative equipment, the analysis method has been optimized from LC-MS (liquid chromatography-mass spectrometry) to LC-MS/MS (liquid chromatography-tandem mass spectrometry). This allows for even more precise measurement of organic acids.

Therefore, the following changes will be implemented from **April 1st, 2025** onwards:

1. Adjustment of reference ranges

There are updated reference ranges for the following request profiles and parameters:

Organix® Dysbiosis (1265)

Updated reference range	
4-Hydroxybenzoic acid	< 0.63
Benzoic acid	< 67
Dihydroxyphenylpropionic acid	< 1.5
Hippuric acid	< 640
Tricarballylic acid	< 1.4
Tartaric acid	< 9.6
Citramalic acid	< 3.1
p-Hydroxyphenylacetic acid	< 10
m-Hydroxyphenylacetic acid	< 3.4
p-Cresol sulfate	< 105
Indican	< 76
D-Arabinitol	*

Billing and prices	
GOÄ (scale of charges and fees for physicians):	3585.H1, 3783, 4078, 4079
Price for direct payers:	68.77 €
Price for private patients:	102.54 €

* This parameter is not affected by the change of method. Therefore, the reference range does not need to be updated.

Important laboratory information

Organix® Energy metabolism (7207)

Updated reference range	
Malic acid	< 2.0
α-Ketoglutaric acid	< 31
Succinic acid	< 3.0
Cis-aconitic acid	< 160
Fumaric acid	< 2.5
Citric acid	< 610
Lactate	*
Pyruvate	*
Lactate/Pyruvate ratio	*

Billing and prices	
GOÄ (scale of charges and fees for physicians):	3776, 3781, 3783, 3585.H1
Price for direct payers:	65.86 €
Price for private patients:	75.73 €

Organix® Neuro (7208)

Updated reference range	
Vanillylmandelic acid	< 3.6
Homovanillic acid	< 5.6
5-Hydroxyindoleacetic acid	< 3.6
Tryptophan	*
Xanthurenic acid	< 1.0
L-Kynurenine	< 1.5
Kynurenic acid	< 2.3
Quinolinic acid	< 8.0
Kynurenic acid/L-Kynurenine ratio	> 1.6
L-Kynurenine/Tryptophan ratio	< 0.07

Billing and prices	
GOÄ (scale of charges and fees for physicians):	4071, 4073, 4077
Price for direct payers:	99.66 €
Price for private patients:	114.60 €

Organix® Vitamin B deficiency (7209)

Updated reference range	
α-Ketoisocaproic acid	< 1.5
α-Keto-β-methylvaleric acid	< 1.4
α-Ketoisovaleric acid	< 3.5
Methylmalonic acid	*
Xanthurenic acid	< 1.0

Billing and prices	
GOÄ (scale of charges and fees for physicians):	3783, 4078, 4079
Price for direct payers:	66.44 €
Price for private patients:	99.86 €

* This parameter is not affected by the change of method. Therefore, the reference range does not need to be updated.

Important laboratory information

The respective adjustments affect the all-in-one profile "Organix® Total":

Organix® Total (9888)
Organix® Dysbiosis, Organix® Energy metabolism, Organix® Neuro, Organix® Vitamin B deficiency, Organix® TMAO

Billing and prices	
GOÄ (scale of charges and fees for physicians):	3776, 3781, 3783, 4071, 4073, 4077, 2x 4078, 4079 3585.H1
Price for direct payers:	231.96 €
Price for private patients:	290.19 €

Please note: The adjustment of the reference ranges also affects the (medical practice) profiles that contain the Organix® profiles mentioned above.

The profile "Organix® TMAO" is not affected by the adjustment of the reference ranges since its parameters trimethylamine oxide (TMAO), trimethylamine (TMA), betaine and choline are measured by using a different method.

Organix® TMAO (9898)

Billing and prices	
GOÄ (scale of charges and fees for physicians):	3585.H1, 4078
Price for direct payers:	35.55 €
Price for private patients:	40.88 €

2. Elimination of parameters for assessing the detoxification capacity

The following parameters will be eliminated from April 1st, 2025 onwards:

- 2-Methylhippuric acid
- α-Hydroxybutyric acid
- Glucaric acid
- Orotic acid
- Pyroglutamic acid

Therefore, the profile "Organix® Detoxification capacity" (7210) will no longer be available. Additionally, the parameters will no longer be included in the profile "Organix® Total" (9888).

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Important laboratory information

Alternatively, the laboratory parameters listed in Table 1 below can be used to asses the metabolic state and detoxification:

Table 1: Alternative laboratory parameters for assessing the metabolic state and detoxification

Bisheriger Parameter	Funktion	Alternative Parameter und Funktion
2-Methylhippuric acid Glucaric acid	Assessment of liver detoxification	■ **Liver enzymes GPT, GOT, gamma-GT** (6331) (serum) for general liver function assessment ■ **Glutathione** (5356) (EDTA blood, cooled) as a direct marker for antioxidant capacity and phase II detoxification ■ **Amino acids glycine and cysteine** (5382) (test package amino acids) for the assessment of glutathione synthesis ■ **Superoxide dismutase** (5113) (EDTA blood) as a marker for antioxidant defense ■ **Genetic diagnostics of detoxification**: - **Glutathione S-transferase theta-1** (GSTT1) (8103) (EDTA blood) for the assessment of the detoxification capacity - **Cytochrome P450** (EDTA blood) - CYP1A2 (rs762551) (5723) - CYP2C19 (rs4244285, rs4986893) (8411)
α-Hydroxybutyric acid Pyroglutamic acid	Glutathione balance and use	■ **Glutathione** (5356) (EDTA blood, cooled) for the assessment of its synthesis and availability ■ **Glutamic acid, glycine and cysteine** (5382) (test package amino acids) for analyzing the pre-stages of glutathione formation
Orotic acid	Dysfunction of urea synthesis	■ **Ammonia** (7636) (EDTA plasma, frozen) for the assessment of nitrogen excretion and liver function

Do you have any questions or would you like to order sampling materials?
Our customer service team will be happy to help you via
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Best regards

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